Abstract of the Disclosure

Attrition resistant, sorbent compositions for the removal of elemental sulfur and sulfur compounds, such as hydrogen sulfide and organic sulfides, from cracked-gasoline and diesel fuels are prepared by the impregnation of a sorbent support comprising zinc oxide, expanded perlite, and alumina with a promoter such as nickel, nickel oxide or a precursor of nickel oxide followed by reduction of the valence of the promoter metal in the resulting promoter metal sorbent support composition.